PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Amir et al.)
Serial No.: 10/044,720)
Group Art Unit: 2161)
Filed: January 11, 2002)
Examiner: Cam Linh T. NGUYEN)
For: SYNTHESIZING INFORMATION-)
BEARING CONTENT FROM)
MULTIPLE CHANNELS)

APPELLANTS' BRIEF UNDER 37 C.F.R. §1.192

MS – APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appellants' Brief is filed in response to a Final Office Action dated March 8, 2005, an Advisory Action dated May 23, 2005, and a Notice of Appeal received June 10, 2005. The Appellants are also submitting herewith a petition for an extension of time extending to September 12, 2005 (the next business day after September 10, 2005), the period for filing Appellants' Brief. Reconsideration of the Application, withdrawal of the rejections and allowance of the claims are respectfully requested.

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I.   REAL PARTY IN INTEREST

The real party in interest is International Business Machines (IBM) of Armonk, NY.

II.   RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

III.   STATUS OF CLAIMS

Claims 1-36 are pending. Claims 1-10 and 12-35 are rejected, claims 11 and 35 have been indicated as being allowable if rewritten in independent form.

The Examiner's rejection of claims 1-10 and 12-35 is on appeal.

Attached hereto is an Appendix containing a copy of claims 1-36, which include the claims involved in this appeal.

IV.   STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection of March 8, 2005. The Appellants submitted a response with amendment under 37 C.F.R. §1.111 on December 2, 2004 in response to a non-final office action. The Examiner issued a final rejection of claims 1-10 and 12-35 in the Final Office Action of March 8, 2005 and the Appellants submitted a response without amendment to this Final Office action. The currently pending amendments are therefore as submitted and entered in the Appellants' amendment of December 2, 2004.

V.   SUMMARY OF THE INVENTION

According to a preferred embodiment, the presently claimed invention is directed towards a computing system and method that summarizes several content channels into domain-independent digests. Digests are generated by analyzing mutually similar elements of content (EOC) or new EOC which reflect the degree of corroboration (DOC) or other comparative measure between the original EOC. The original EOC and the derived digests may comprise at least one of text, video, audio, video speech signals, and digital media. As an example, suppose an earthquake is reported in the news.

Numerous articles would be found in multiple sources, and most of the important information will be somewhat similar in all the sources. Instead of showing numerous "hits" for the same basic premise, the details would be summarized into several condensed digests containing different topics relevant to the earthquake, e.g. the financial impact of the earthquake. The user would have a much easier time finding relevant information in the digests. Specification, page 5, line 20 through page 6, line 5.

The processing receives a query for information and performs a search for the requested information. The search produces a stream of tagged Elements Of Content (EOC) that are provided to and processed by a pattern-matching filter or similar function in order to be provided to a set of virtual buffers where each virtual buffer contains appropriately related EOC. Specification, page 9, lines 5-22. The processing tags each EOC with metadata that indicate source, date, and other relevant information. Specification, page 11, lines 18-22. The processing then performs pattern matching of each EOC, calculates a distance function from every EOC to every other EOC, and output the EOC into a set of virtual buffers containing appropriately related EOC of less than a given distance value. Specification, page 12, line 14 through page 13, line 6. The processing further creates virtual summary buffers and then concatenates the EOC in each virtual buffer, applies a comparative analysis filter to remove redundant sub-elements, and presents the results as summary digests. Specification, page 13, line 16 through page 15, line 15.

VI. ISSUES

Whether claims 1-5, 7-10, 12-30 and 32-35 are unpatentable over *Ingle et al* (U. S. Patent Publication 2002/0138524) in view of *Chang et al.* (U.S. Patent Publication 2003/0050923) under 35 U.S.C. §103(a).

Whether claims 6 and 31 are unpatentable over *Ingle et al* (U. S. Patent Publication 2002/0138524) in view of *Chang et al.* (U.S. Patent Publication 2003/0050923) in further view of *Bull et al.* (U. S. Patent Publication 2003/0187726) under 35 U.S.C. §103(a).

VII. GROUPING OF CLAIMS

Group I: Claims 1-5, 7-8, 12, 13, 15-17, 19, 20, 22-24, 26-30, and 32-33 stand or fall together.

Group II: Claims 9, 18, 25 and 34 stand or fall together.

Group III: Claims 10, 14, 21 and 35 stand or fall together.

Group IV: Claims 6 and 31 stand or fall together.

VIII. ARGUMENT

A. WHETHER CLAIMS 1-5, 7-10, 12-30 AND 32-35 ARE UNPATENTABLE OVER *INGLE* ET AL. IN VIEW OF *CHANG* ET AL.

In the Examiner's Final Office Action of March 8, 2005, the Examiner rejected claims 1-5, 7-10, 12-30, and 32-35 under 35 U.S.C. § 103(a) as being unpatentable over *Ingle et al.* (U. S. Patent Publication 2002/0138524) (Hereinafter *Ingle*) in view of *Chang et al.* (U. S. Patent Publication 2003/0050923) (Hereinafter *Chang*). The Appellants submit that claims 1-5, 7-10, 12-30, and 32-35 are not unpatentable over *Ingle* in view of *Chang* under 35 U.S.C. § 103(a). The Appellants assert that the *Ingle* and *Chang* references, taken either alone or in combination with one another, do not teach or suggest the claimed limitations of: "providing the EOC [Element of Content] to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other" and "calculating a distance function from every EOC to every other EOC." The cited prior art references also do not teach or suggest: "a set of virtual buffers" and "calculating a distance function from every EOC to every other EOC" as set forth for the presently claimed invention. Furthermore, the cited prior art references do not teach or suggest: "virtual summary buffers" or "applying a comparative analysis filter to remove redundant sub-elements" and "synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value" as is set forth for the presently claimed invention.

Group I: Claims 1-5, 7-8, 12, 13, 15-17, 19, 20, 22-24, 26-30, and 32-33

The Applicants suggest selection of independent claim 1 as representative of the Group I claims. With regards to Group I claims, the Appellants traverse the Examiner's assertion that the *Ingle* reference teaches the claim limitation of "providing the EOC [Element of Content] to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other." Office Action dated March 8, 2005, page 3, first paragraph, citing *Ingle*, paragraphs 0056-0057. The Appellants further traverse the Examiner's assertion that "the memory in the assembly engine 108" of the *Ingle* reference is an adequate teaching of a "virtual buffer" as is set forth by the Group I claims. *Id.* The Appellants assert that the Group I claims recite "a set of virtual buffers" and that the subject method and computer readable medium limitations specify "providing the EOC to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other.

The *Ingle* reference is directed towards a system and method of automatically generating a summary document with information mined from a data repository. *Ingle*, Abstract. The exemplary embodiment of *Ingle* is directed towards generating a clinical resume that include information for a medical discharge summary. *Ingle*, page 3, paragraphs 0056 and 0057. The system of *Ingle* retrieves data from one or more sources, tags the retrieved data and stores the tagged data in a database. *Ingle*, page 3, paragraph 52. The processing then mines the tagged data stored in databases. *Ingle*, page 3, paragraph 0053. Clinical resumes that are generated by the system and method of *Ingle* include information that pertains to a particular patient. *Ingle*, page 1, paragraph 0004.

The Appellants assert that *Ingle* teaches that the assembly process performed by the assembly engine 108 "results in a relatively large marked up document." *Ingle*, page 3, paragraph 57 (emphasis added). The *Ingle* reference only contemplates processing data to assemble a single document. The Appellants assert that the focus of the *Ingle* reference of assembling a single document, i.e., a single file or data structure for storing

information, is not a teaching or suggestion of the recited limitation of the presently claimed invention, which specifies "a set of virtual buffers," especially when the invention is considered "as a whole." The Group I claims further describe the "set of virtual buffers" by specifying that "each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other." The elements of this particular claim language are described in the description of the set of virtual buffers in the Appellants' specification. For example, the specification states that "each virtual buffer contains a set of appropriately related EOC." Specification, page 9, lines 21 and 22. "Each of the virtual buffers 404 is then made to contain an EOC and every EOC that is less than a certain 'distance' from it." Specification, page 10, lines 1-3 (emphasis added). Assuming, *arguendo*, that it may be possible for a "set" to contain a single element, the Appellants assert that in the context of the Group I claims, when considered as a whole, it is clear that the claimed virtual buffers of the presently claimed invention include multiple buffers that are independent and separate from one another, and that are substantively different from, the single file or data structure of the *Ingle* reference.

The Appellants assert that the "set of virtual buffers" as specified in the context of the Group I claims is not taught or suggested by the structures described in the *Ingles* reference, which only contemplates assembling a single document that contains information related to the query. The Appellants further assert that the "set of virtual buffers" specified by Group I claims cannot simply be a collection of a plurality of the single document that is taught by *Ingle*. The EOC in the Group I claims are each provided to the entire set of virtual buffers, and the processing places the EOC into a particular virtual buffer within the set of virtual buffers based upon a relationship of that EOC, which is determined by a given distance value, to the other EOC that are in each of the particular virtual buffers within the set of virtual buffers. The Appellants assert that this is substantially different than the teachings of *Ingle*, which assemble a single document that contains data that satisfies pre-specified criteria for that document, such as data that pertains to the particular patient being discharged. *Ingle*, page 1, paragraph 0004.

The Examiner further stated in the Advisory Action that the *Ingles* reference discloses "a 'buffer' that is used to store the 'information object' or 'EOC' in a table with specific data fields. Clearly, those files in the 'buffer' must be predefined to store the EOC." Advisory Action dated May 23, 2005, item 11 (citing *Ingles*, paragraph 0062). The Examiner asserts that this is a teaching of "one of the set of virtual buffers that is predefined to contain EOC <u>with less than a given distance value between each other</u>." *Id.* (emphasis added). The Appellants assert that the Examiner's characterization of the teachings of the *Ingles* reference does not address the last part of the cited limitation, i.e., "EOC <u>with less than a given distance value between each other</u>." Although the buffer may be <u>predefined to store the EOC</u>, the Ingles reference does not teach or suggest that the information objects stored in the buffer have "less than a given distance value between each other" as is recited for the Group I claims.

In addition to the above described differences between the teachings of *Ingle* and the structure of the claimed "set of virtual buffers," the Appellants assert that the teachings of *Ingles* and *Chang*, taken either alone or any combination with one another or with the other cited prior art of record, do not teach or suggest "<u>one of the set of virtual buffers</u> that is pre-defined to contain EOC with less than a given distance value between each other" as is recited for the Group I claims. As discussed above, the *Ingle* reference is limited to forming a single document, and does not teach or suggest "a set of virtual buffers." The *Ingle* reference does not teach or suggest assembling multiple data objects based upon relationships between and among the individual data objects to be assembled, as opposed to the relationship between the data objects and criteria specified for the assembled data. The *Ingle* reference is limited to mining data objects from a database and assembling data objects into a summary document according to specified criteria for that summary. *Ingle*, page 3, paragraph 0052. The Appellants assert that mining data objects returns data objects that match pre-specified searching criteria, and does not include comparing data objects to each other in order to produce a set of virtual buffers, as is specified by the Group I claims.

The *Chang* reference is directed towards maximizing expected generalization for learning complex query concepts. *Chang*, title. The system of *Chang* learns a concept by presenting samples to a user and receiving feedback from the user regarding that sample's relationship to the user's query concept. Samples to be presented are intelligently selected to minimize the learning time and training effort by the user. *Chang*, page 2, paragraph 28.

The Appellants assert that the *Chang* reference is limited to identifying objects based upon the object's similarity to "a user's current query concept." *Chang*, page 2, paragraph 0028. The Appellants assert that neither *Chang*, *Ingle*s, nor any combination of the two cited references, teaches or suggests "a set of virtual buffers" where "each EOC being provided to one of the set of virtual buffers that is pre-defined <u>to contain EOC</u> with less than a given distance value <u>between each other</u>" as is set forth in the Group I claims. The Appellants assert that the distance value between each EOC in a virtual buffer, as is described in the Group I claims, is different than comparing data objects to a "current query concept" since ensuring that EOC have distance values relative to each other allows the attributes of EOC within a particular virtual buffer to vary with relation to a particular set of attributes. The allowed variation of attributes for EOC contained within a particular virtual buffer in the invention set forth by the Group I claims are therefore substantially different than the "query concept" of the *Chang* reference.

Further, the Appellants traverse the Examiner's assertion that *Chang* teaches "calculating a distance function from every EOC to every other EOC." The teachings of *Chang* are limited to determining distances between "a <u>user's current query concept</u>" and samples in a database. *Chang*, page 2, paragraph 28. The Appellants assert that this differs from "calculating a distance function <u>from every EOC to every other EOC</u>" as is set forth in the Group I claims. The distance determination as set forth in the Group I claims determines the distance between all combinations of EOC, and not the distance between each EOC and a query concept as is taught by *Chang*. The Appellants further assert that *Ingle*, taken either alone or in any combination with *Chang* and/or the other

cited references, also does not teach or suggest "calculating a distance function <u>from</u> <u>every EOC</u> <u>to</u> <u>every other EOC</u>" as is set forth in Group I claims.

The Appellants assert that the *Chang* reference, taken either alone or in any combination with the *Ingle* reference or other cited prior art references, fails to teach the above discussed limitations that are recited by the Group I claims. Therefore, the Appellants assert that the Group I claims are patentable over the *Ingle* and *Chang* references, and that the rejection of the Group I should be reversed.

<u>Group II: Claims 9, 18, 25 and 34</u>

The Applicants suggest selection of claim 9 as representative of the Group II claims. With regards to the Group II claims, the Appellants traverse the Examiner's assertion that the *Ingle* reference teaches "creating virtual summary buffers." The Examiner cites the last paragraph at the conclusion of the specification of the *Ingle* reference as a teaching of this limitation. Office Action dated March 8, 2005, page 4, fourth item, citing *Ingle*, page 6, paragraph 106. As discussed above with regards to the "set of virtual buffers," the *Ingle* reference is limited to creating a single document. This single document is created by assembling data into a format for a pre-defined discharge summary. *Ingle*, page 3, paragraph 46. The Appellants assert that the "discharge summary" referred to in paragraph 0046 of the *Ingle* reference corresponds to the "summary document" discussed in the cited portion of the *Ingle*. *Ingle*, page 6, paragraph 106.

The Appellants assert that the recitation of "virtual summary buffers" in the Group II claims indicates that these virtual summary buffers are separate from the "virtual buffers" recited by claims from which these claims depend. The virtual summary buffers are described in the Appellants' specification as being created from the virtual buffers. Specification, page 13, lines 16-17. The Appellants assert that this differs from the "discharge summary" of *Ingle*, which is the only assembly of data objects. Additionally, the *Ingle* reference only teaches creating a single summary which the Appellants assert is not a teaching or suggestion of the structure recited by the Group II claims when those

claims are considered "as a whole, which recites the term "buffers" in the plural and clearly defines a structure that includes multiple virtual buffers for the reasons discussed above with regards to the "virtual buffers" of the Group I claims. The Appellants submit that the structure set forth in the Group II claims, which contemplates a plurality of virtual summary buffers, is a sufficiently significant difference over the single summary document of the *Ingle* reference to preclude the teachings of *Ingle* from teaching or suggesting "the set of virtual buffers" set forth for the Group I claims. The Appellants assert that "the set of virtual buffers" as claimed is not a simple extension of the single document taught by *Ingle* since these virtual buffers, and the associated virtual summary buffers, are all separate and independent possible destinations for EOC when "providing the EOC to a set of virtual buffers." This differs from creating a single document (i.e., a single file for storing information) and assembling data into that single document, as is taught by *Ingle*.

The Appellants assert that the *Chang* reference, taken either alone or in any combination with the *Ingle* reference or other cited prior art references, fails to teach the creation of "virtual summary buffers" as is recited by the Group II claims. Therefore, the Appellants assert that the Group II claims are patentable over the *Ingle* and *Chang* references, and that the rejection of the Group II should be reversed.

Group III: Claims 10, 14, 21 and 35

The Applicants suggest selection of claim 10 as representative of the Group III claims. With regards to the Group III claims, the Appellants traverse the Examiners assertion that the combination of *Ingle* and *Chang* teach "applying a comparative analysis filter to remove redundant sub-elements" and "synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value." Office Action Dated March 8, 2005, page 4, fifth item (citing *Chang* paragraph 0132 and *Ingle* paragraph 0106).

The Examiner asserts that "concatenating the EOC in each virtual buffer" corresponds to the clustering of *Chang*. Office Action dated March 8, 2005, page 4, fifth

item, citing *Chang*, paragraph 0132. The cited portion of *Chang* refers to a process for identifying image samples that are to be presented to a user for purposes of training an image recognition system to recognize image samples that are declared to "match" a given query sample. Judicious selection of these samples reduces the amount of work, and time, needed to train the image matching system. *Chang*, page 6, paragraphs 0123 through 0132. The Appellants assert that the "clustering" discussed by the *Chang* reference refers to identifying images that are similar and therefore facilitating the selection of sufficiently different images. For example, *Chang* states "the query-concept learner process often attempts to select samples from among different clusters of samples." *Chang*, page 6, paragraph 0132. The Appellants assert that the clustering taught by *Chang* is a conceptual association of data objects and is not a teaching or suggestion of "concatenating the EOC in each virtual buffer" as is recited for the Group III claims, particularly when they are considered "as a whole."

The Examiner cites the "summary document" of *Ingle* as a teaching of "synthesizing summary digests." Office Action dated March 8, 2005, page 4, fifth item, citing *Ingle*, page 6, paragraph 0106. The Applicant asserts that the subject limitation recites "synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value." The Appellants assert that the teachings of the *Ingle* reference are limited to creating summary documents based upon mined data and tags marking portions of the mined data. *Ingle*, page 2, paragraph 0044 to page 3, paragraph 0046. The Appellants assert that there neither the *Ingle* or *Chang* reference, taken either alone or in any combination with one another or other cited prior art, teach or suggest "extracting context-preserving EOC" as is recited by the Group III claims.

The Appellants assert that the *Chang* reference, taken either alone or in any combination with the *Ingle* reference or other cited prior art references, fails to teach the above discussed limitations that are recited by the Group III claims. Therefore, the Appellants assert that the Group III claims are patentable over the *Ingle* and *Chang* references, and that the rejection of the Group III should be reversed.

B. WHETHER CLAIMS 6 AND 31 ARE UNPATENTABLE OVER *INGLE* ET AL
IN VIEW OF *CHANG* ET AL. IN FURTHER VIEW OF BULL ET AL.

In the Examiner's Office Action of August 18, 2004, the Examiner rejected claims 6 and 31 under 35 U.S.C. § 103(a) as being unpatentable over *Ingle* et al. (U. S. Patent Publication 2002/0138524) (Hereinafter *Ingle*) in view of *Chang* et al. (U. S. Patent Publication 2003/0050923) (Hereinafter *Chang*) in further view of *Bull* et al (U. S. Patent Publication 2003/0187726) (Hereinafter *Bull*). The Appellants submit that claims 6 and 31 are not unpatentable over *Ingle* in view of *Chang* in further view of *Bull* under 35 U.S.C. § 103(a). The Appellants assert that the *Ingle, Chang* and *Bull* references, taken either alone or in any combination with one another, does not teach or suggest the claimed limitations of: "wherein the query is received via an agent pushing relevant information to a user based on a user profile" as is set forth for the presently claimed invention."

Group IV: Claims 6 and 31

The Applicants suggest selection of independent claim 6 as representative of the Group IV claims. With respect to the *Bull* reference, the Examiner stated that the combination of *Ingle/Chang* fails to disclose: "wherein the query is received via an agent pushing relevant information to a user based on a user profile." Office Action dated March 8, 2005, page 5, penultimate paragraph. The *Bull* reference was cited in combination with the *Ingle* and *Chang* references to add *Bull's* teaching of "an information aggregation and synthesization system comprising an agent and a user profile." Office Action dated March 8, 2005, page 5, last paragraph, citing *Bull*, FIG. 2, paragraphs 0033 and 0036. The Appellants point out that the "agent" recited by the Group IV claims is explicitly defined in those claims as "for <u>pushing</u> relevant information to a user." The teachings of the *Bull* reference are limited to maintaining user profiles. These profiles are used, for example, to present a customized sales presentation, *Bull*, paragraph 0008, or to narrow information retrieval for the user, *Bull*, paragraph 0029. The Appellants assert that the *Bull* reference, taken either alone or in any combination with the *Ingle, Chang* or other cited prior art references, does not teach or suggest "an

agent for <u>pushing</u> relevant information to a user" as is recited by the Group IV claims. The technology of "pushing relevant information" is a known technology in the art whereby information is transmitted to a user without the user explicitly requesting that particular information transmission. See, *Webopedia*, "Push: (1) In client/server applications, to send data to a client without the client requesting it." See http://www.webopedia.com/TERM/p/push.html. The Appellants assert that the cited prior art of reference does not teach or suggest using "an agent for <u>pushing</u> relevant information" in the context of the claimed invention, when the Group IV claims are considered "as a whole."
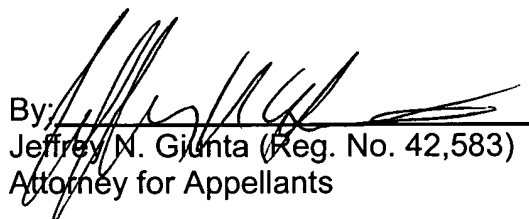
The Appellants assert that the *Chang* and *Bull* references, taken either alone or in any combination with the *Ingle* reference or other cited prior art references, fails to teach the above discussed limitations that are recited by the Group IV claims. Therefore, the Appellants assert that the Group IV claims are patentable over the *Ingle* and *Chang* references, and that the rejection of the Group IV should be reversed.

IX.   CONCLUSION

For the reasons stated above, Appellants contend that each claim is patentable. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,

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IX. APPENDIX

1.   A method comprising the steps of:

receiving a query;

separating a plurality of information sources into individual elements of content (EOC);

tagging each EOC with metadata;

pattern matching each EOC;

calculating a distance function from every EOC to every other EOC; and

providing the EOC to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other.

2.   The method of claim 1, wherein the plurality of information sources comprises a plurality of content channels.

3.   The method of claim 1, wherein the plurality of information sources comprises a plurality of related stories delivered on a single channel at different times.

4.   The method of claim 1, wherein the query is received via a user interface.

5.   The method of claim 1, wherein the query is received via an Internet browser.

6.   The method of claim 1, wherein the query is received via an agent for pushing relevant information to a user based on a user profile.

7.   The method of claim 1, wherein the plurality of information sources comprises at least one of:

Internet-based, intra-net based, and other online forms of news and information resources;

video broadcasts;

radio broadcasts;

press release forums; and

financial forums.

8.   The method of claim 1, wherein the EOC comprise at least one of:

text;

video;

audio; and

digital media.

9.   The method of claim 1, further comprising the step of creating virtual summary buffers.

10.   The method of claim 1, further comprising the steps of:

concatenating the EOC in each virtual buffer;

applying a comparative analysis filter to remove redundant sub-elements;

synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value; and

presenting the results as summary digests.

11.   The method of claim 10, wherein the summary digests comprises color-coded sub-elements of content based on the number of EOC containing that particular sub-element.

12.	A system comprising:

a digest synthesizing application, wherein the digest synthesizing application, in response to receiving a query, separates a plurality of information sources into individual elements of content (EOC), tags each EOC with metadata, pattern matches each EOC, and calculates the distance function from every EOC to every other EOC;

a result set manager, communicatively coupled to the digest synthesizing application, for providing EOC to a result set; and

a result set, communicatively coupled to the result set manager, comprising a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other.

13.	The system of claim 12, wherein the digest synthesizing application comprises:

a query handler, for receiving a query ;

an input filter, communicatively coupled to the query handler, for separating a plurality of information sources into individual elements of content (EOC);

a distance calculator, communicatively coupled to the input filter, for calculating the distance function from every EOC to every other EOC; and

a pattern-matching filter, communicatively coupled to the distance calculator, for pattern matching each EOC.

14.	The system of claim 13, wherein the digest synthesizing application further comprises:

a comparative analysis filter, communicatively coupled to the pattern-matching filter, for removing redundant sub-elements.

15.   The system of claim 12, further comprising:

a user interface; and

a user interface/event manager, communicatively coupled to the user interface and the digest synthesizing application, for receiving a user query from the user interface and presenting the result set to the user interface.

16.   The system of claim 12, further comprising an application programming interface, communicatively coupled to the digest synthesizing application, for communicating with other applications.

17.   The system of claim 12, wherein the result set comprises:

a set of tagged EOC;

a set of virtual buffers, communicatively coupled to the set of tagged EOC; and

a set of summary digests, communicatively coupled to the set of virtual buffers.

18.   The system of claim 17, wherein the result set further comprises a set of virtual summary buffers.

19.   An apparatus comprising:

a digest synthesizing application, wherein the digest synthesizing application, in response to receiving a query, separates a plurality of information sources into individual elements of content (EOC), tags each EOC with metadata, pattern matches each EOC, and calculates the distance function from every EOC to every other EOC;

a result set manager, communicatively coupled to the digest synthesizing application, for outputting EOC to a result set; and

a result set, communicatively coupled to the result set manager, comprising a set of virtual buffers for storing EOC less than a given distance value.

20.   The apparatus of claim 19, wherein the digest synthesizing application comprises:

a query handler, for receiving a query ;

an input filter, communicatively coupled to the query handler, for separating a plurality of information sources into individual elements of content (EOC);

a distance calculator, communicatively coupled to the input filter, for calculating the distance function from every EOC to every other EOC; and

a pattern-matching filter, communicatively coupled to the distance calculator, for pattern matching each EOC.

21.   The apparatus of claim 20, wherein the digest synthesizing application further comprises:

a comparative analysis filter, communicatively coupled to the pattern-matching filter, for removing redundant sub-elements.

22.   The apparatus of claim 19, further comprising:

a user interface; and

a user interface/event manager, communicatively coupled to the user interface and the digest synthesizing application, for receiving a user query from the user interface and presenting the result set to the user interface.

23.   The apparatus of claim 19, further comprising an application programming interface, communicatively coupled to the digest synthesizing application, for communicating with other applications.

24.   The apparatus of claim 19, wherein the result set comprises:

a set of tagged EOC;

a set of virtual buffers, communicatively coupled to the set of tagged EOC; and

a set of summary digests, communicatively coupled to the set of virtual buffers.

25.   The apparatus of claim 24, wherein the result set further comprises a set of virtual summary buffers.

26.   A computer readable medium including computer instructions for driving a digest synthesizing application, the computer instructions comprising instructions for:

receiving a query;

separating a plurality of information sources into individual elements of content (EOC);

tagging each EOC with metadata;

pattern matching each EOC;

calculating a distance function from every EOC to every other EOC; and

providing EOC to a set of virtual buffers, each EOC being provided to one of the set of virtual buffers that is pre-defined to contain EOC with less than a given distance value between each other.

27.   The computer readable medium of claim 26, wherein the plurality of information sources comprises a plurality of content channels.

28.   The computer readable medium of claim 26, wherein the plurality of information sources comprises a plurality of related stories delivered on a single channel at different times.

29.   The computer readable medium of claim 26, wherein the query is received via a user interface.

30.   The computer readable medium of claim 26, wherein the query is received via an Internet browser.

31.   The computer readable medium of claim 26, wherein the query is received via an agent for pushing relevant information to a user based on a user profile.

32.   The computer readable medium of claim 26, wherein the plurality of information sources comprises at least one of:
        Internet-based, intra-net based, and other online forms of news and information resources;
        video broadcasts;
        radio broadcasts;
        press release forums; and
        financial forums.

33.   The computer readable medium of claim 26, wherein the EOC comprise at least one of:
        text;
        video;
        audio; and
        digital media.

34.   The computer readable medium of claim 26, further comprising computer instructions for a step of creating virtual summary buffers.

35.   The computer readable medium of claim 26, further comprising computer instructions for the steps of:

      concatenating the EOC in each virtual buffer;

      applying a comparative analysis filter to remove redundant sub-elements;

      synthesizing summary digests by extracting context-preserving EOC, the EOC having a distance function value less than a predetermined value; and

      presenting the results as summary digests.

36.   The computer readable medium of claim 35, wherein the summary digests comprises color-coded sub-elements of content based on the number of EOC containing that particular sub-element.